

## **ABSTRACT**

A method for molding panels in a sheet molding system comprised of a thermoplastic sheet delivery station and two mold halves, the method comprising the steps of delivering two sheeting layers of thermoplastic material between the two mold halves; inserting a rigidizing insert between 5 the two sheeting layers of thermoplastic material; closing the mold halves to bring the two sheeting layers of thermoplastic material in contact with the insert; and compressing the thermoplastic sandwich between the mold halves to form a panel. A thermoplastic-insert sandwich and a laminate panel comprised of thermoplastic layers abutting a pre-manufactured insert are also claimed.